

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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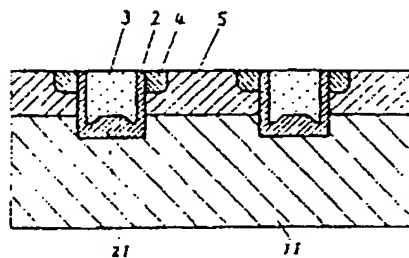
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INVENTOR : UNO TOSHIHIKO;

INT.CL. : H01L 29/784

TITLE : SEMICONDUCTOR DEVICE AND  
MANUFACTURE THEREOF



ABSTRACT : PURPOSE: To reduce a capacitance between the gate and the drain of a field effect transistor and to perform a high speed operation by increasing the thickness of an insulating film in the bottom of a groove thicker than that of an insulating film of the sidewall of the groove.

CONSTITUTION: An oxide film 21 formed in a bottom of a groove of a thermal oxide film formed in a groove is formed thicker than an oxide film 2 formed on the sidewall of the groove. Thus, a capacity between a gate electrode 3 formed of polysilicon and a drain region 11 can be reduced. Since the film 21 of the bottom of the groove is formed thicker than the film 2 of the sidewall of the groove, a capacitance between the gate and the drain of a field effect transistor can be reduced, and a high speed operation can be performed.

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